

REMARKS

Claims 1, 2, and 4-8 are pending in this application. By this Amendment, claims 1 and 8 are amended and claim 3 is canceled without prejudice to, or disclaimer of, the subject matter recited therein. Support for the amendments to the claims may be found, for example, in the claims as originally filed. No new matter is added.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

In view of the foregoing amendments and the following remarks, reconsideration and allowance are respectfully requested.

I. Rejection Under 35 U.S.C. §103

The Office Action rejects claims 1-8 under 35 U.S.C. §103(a) over WO 02/089244 to Ibrahim ("Ibrahim") in view of U.S. Patent Application Publication No. 2004/0038114 to Wariishi ("Wariishi"). Claim 3 is canceled, thus the rejection is moot as to that claim. As to the remaining claims, Applicant respectfully traverses the rejection.

Claim 1 recites, *inter alia*:

A fuel cell system comprising ... a flow amount controlling unit that controls flow amounts of the fuel gas passing through the first supply passage and the second supply passage, wherein the flow amount controlling unit ... controls the flow amount such that an extreme downstream position of the fuel gas coincides

with a position at which the exhaust passage is connected to the second supply passage when the opening and closing unit is open.

Claim 8 is directed to a method of supplying fuel gas that recites similar features. Ibrahim and Wariishi, individually or in combination, would not have rendered obvious at least the above features of claims 1 and 8.

According to the above features of claims 1 and 8, when the opening and closing unit provided on the exhaust passage is open, impurities in the anode are discharged with any unused hydrogen. Thus, at the time of discharging the impurities, the flow amount is controlled so that the extreme downstream position of the hydrogen coincides with the position at which the exhaust passage is arranged. Thereby, the impurities may be effectively exhausted.

The Office Action asserts that Ibrahim discloses, "The downstream position of the fuel gas coincides with the exhaust passage connected to the second supply passage." Office Action, pages 2-3. The Office Action does not cite any specific portion of Ibrahim that makes this disclosure. However, Applicant respectfully submits that Ibrahim does not disclose such a system.

As shown in Fig. 1 of Ibrahim, a second supply line (22) passes through a T-joint (23) where it may enter a purge passage or enter the anode at a supply inlet (13). *See* Ibrahim, Fig. 1 and paragraph [0021]. Whether the fuel in the second supply line (22) enters the purge passage depends on the position of purge valve (24). *Id.* However, regardless of whether purge valve (24) in Fig. 1 of Ibrahim is open or closed, the purge passage is connected at the middle of the second supply line (22). Thus, Ibrahim does not disclose a fuel cell system or a method that controls the flow amount such that the extreme downstream position of the fuel gas coincides with a position at which the exhaust passage is connected to the second supply

passage when the opening and closing unit is open, as recited in claims 1 and 8. Wariishi does not address this discrepancy of Ibrahim.

Wariishi merely discloses a switching mechanism for selecting a fluid hole from a plurality of fluid holes used as a fluid supply port for supplying the fluid to the fluid flow field, or selecting the fluid discharge port for discharging the fluid from the fluid flow field to change the flow direction of the fluid in the fluid flow field continuously. *See* Wariishi, claim 1. Additionally, Wariishi discloses that the fuel gas is supplied from two fluid holes. *See* Wariishi, Fig. 8. Thus, Wariishi, at best, only discloses a system or method that supplies fuel gas to an anode in simultaneous flow from two fluid flow holes. Accordingly, Wariishi also does not disclose a system or process that controls the flow amount such that the extreme downstream position of the fuel gas coincides with the position at which the exhaust passage is connected to the second supply passage when the opening and closing unit is open, as recited in claims 1 and 8.

As discussed above, neither Ibrahim nor Wariishi disclose a fuel cell system or a method of supplying fuel gas to a fuel cell that controls the flow amount such that an extreme downstream position of the fuel gas coincides with a position at which the exhaust passage is connected to the second supply passage when the opening and closing unit is open, as recited in claims 1 and 8. Further, neither Ibrahim, Wariishi, nor the Office Action provides any reason or rationale for one of ordinary skill in the art to have modified the disclosure of either Ibrahim or Wariishi to have included the above features of claim 1. Thus, Ibrahim and Wariishi, individually or in combination, would not have rendered obvious claims 1 and 8.

For at least the reasons presented above, Wariishi and Ibrahim, individually or in combination, would not have rendered claims 1 and 8 obvious. The remaining claims variously depend from claim 1 and likewise would not have been rendered obvious. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Nicolas A. Brentlinger
Registration No. 62,211

JAO:NAB/rle

Date: May 31, 2011

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry of this filing; Charge any fee due to our Deposit Account No. 15-0461</p>
